

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Adolph, Horst G.

Serial No. 09/853,927

Group Art Unit: 3641

Filed: May 9, 2001

For: HYDROLYZABLE
PREPOLYMER FOR EXPLOSIVE AND
PROPELLANT BINDERS

Examiner: Edward A. Miller

RECEIVED
FEB 27 2003
GROUP 3600DECLARATION UNDER RULE 1.132

I, Horst G. Adolph, do hereby declare and say as follows:

I possess a Dr. rer. nat. degree in organic chemistry from Tuebingen University, Germany. I have more than 40 years experience in researching and developing ingredients for explosives and propellants, including oxidizers, plasticizers, and polymers for binder use. I am an inventor on over 50 U.S. patents, including several specifically cited by the examiner as prior art regarding this application. I am also a named inventor on the present application.

Being a listed inventor in the above referenced patent application as well as several references cited by the examiner in this case, I am extremely familiar with both the present invention and the prior art in the pertinent technology area. Also, as a result of my training and work experience noted above, I am intimately familiar with polymer technology, particularly as it relates to explosive and propellant binders.

The prepolymers of the present invention are hydrolyzable at room temperature using a dilute acid due to the formal group(s) present within the backbone of the prepolymer, and the absence of chemical groups that would deactivate the formal group(s) in the interaction with

hydrolyzing reagents under normal conditions. The prior art cited by the examiner related to this application discloses polymers having formal groups within the backbone of the polymer that are orders of magnitude more difficult to hydrolyze. These polymers are thus not hydrolyzable under useful conditions. This is due to the presence of deactivating groups that inhibit the formal groups within the backbone from interacting with hydrolyzing reagents. Such groups include electron withdrawing groups that are not hydrophilic such as nitro groups or fluorine groups.

All statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true; and, further, I understand that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



Horst G. Adolph

Date: 2/19/03